

USAG Mannheim Hazardous Material & Hazardous Waste Handling & Disposal Handbook



DPW, Environmental Management Division
Taylor Barracks, Bldg # 346

September 2005



DEPARTMENT OF THE ARMY
UNITED STATES ARMY GARRISON MANNHEIM
UNIT 29901
APO AE 09086-9901

IMAEU-MAN-PW

SEP 23 2005

**MEMORANDUM FOR USAG Mannheim Hazardous Material Handling and
Hazardous Waste Generating Activities**

**SUBJECT: Hazardous Material and Hazardous Waste Handling and Disposal
Handbook**

1. References:

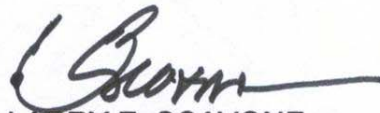
- a. German Final Governing Standards, 1 January 2003, subject: Chapter 5, Hazardous Materials.
- b. German Final Governing Standards, 1 January 2003, subject: Chapter 6, Hazardous Waste.
- c. AR 200-1, Environmental Sustainability and Stewardship, 21 February 1997.

2. The purpose of this handbook is to provide guidance in the management of hazardous material and hazardous waste. It is organized to lead company level Environmental Compliance Officers and Hazardous Waste Management NCOs systematically from the time a product was received to the time a product has to be disposed of as a hazardous waste.

3. The provisions of this handbook are applicable to all organizations and personnel assigned, attached, contracted or supported by the USAG Mannheim. Failure to comply with this handbook may result in punishment under the Uniform Code of Military Justice (UCMJ) or German Law.

4. The proponent for this handbook is the Directorate of Public Works, Environmental Management Division, DSN 381-8447/8675.

Encl


LARRY E. SCAVONE
Director of Public Works

USAG MANNHEIM
HAZARDOUS MATERIAL & HAZARDOUS WASTE HANDLING & DISPOSAL HANDBOOK
RECORD OF REVISIONS

Revision No.	Date	Name and Title	Signature	Changes	Pages Affected
1	09 Dec 2005	S. Fellhauer Env Prot Spec		New DRMO telephone numbers	25
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					

The main body of this handbook is organized in sections based on questions asked frequently. This method allows you to use sections independently that best suit your needs.

CHAPTER 1

HAZARADOUS MATERIAL

TABLE OF CONTENTS

	Page
How do I know if something is a Hazardous Material (HM)?	2-5
What are MSDS's and where can I find them?	6
What are Operating Instructions?	7
What are the labeling requirements for HM containers?	8-10
What are the labeling requirements for HM Storage and Handling Areas?	11-13
Where do I get the required HM labels and signs?	14
How do I properly store HMs?	15-17
How do I properly store Compressed Gas Cylinders?	18
Where can I get storage equipment for HMs?	19
How do I extend the shelf-life of expired HMs?	20
What do I need to know about the HM inventory?	21
How do I document HM storage area inspections?	22
How do I turn-in excess/serviceable HMs?	23-25

HAZARDOUS MATERIAL (HM)

How do I know if something is a hazardous material?

There are several places to look that will give you an indication if something is hazardous. Check the label on the container or look at the Material Safety Data Sheet for clues.

Hazardous Material (Gefahrgut):

A hazardous material is any material that, based on either chemical or physical characteristics is capable of posing unreasonable risk to human health or the environment if improperly disposed of, handled, labeled, stored, or transported. *Hazardous materials exhibit at least one of the characteristics described below.*

Hazardous materials do not include hazardous wastes.

Hazardous Substance (Gefahrstoff):

The definition for hazardous substances is the same as for hazardous material, but **hazardous substances include both hazardous materials and hazardous wastes.**

Characteristics of Hazardous Materials/Substances

01. Items which are explosive upon friction, impact, or ignition (e.g., certain peroxides.)
02. Oxidizing items which are flammable (e.g., peroxides), or which are suitable to ignite combustible materials, or which are explosive in contact with combustibles (e.g., certain chlorates)
03. Extremely flammable items (liquids with a flash point below 0° C, and a boiling point of up to 35° C, or gases which ignite in air under ambient conditions)
04. Highly flammable items (flash point below 21° C, or materials which are easily ignited and keep burning, or materials which release extremely flammable gases in contact with water or moist air)
05. Flammable items (flash point between 21° C and 55° C)
06. Very toxic items, which show very high acute or chronic toxicity if swallowed, inhaled, or upon dermal contact
07. Toxic items, which show high acute or chronic toxicity if swallowed, inhaled, or upon dermal contact
08. Items which are harmful to health, e.g., show moderate acute or chronic toxicity if swallowed, inhaled, or upon dermal contact
09. Corrosive items, which may destroy living tissue
10. Irritant items, which may cause inflammation of the skin
11. Sensitizing items, which may cause allergic reaction at repeated exposure
12. Carcinogenic items
13. Mutagenic items
14. Items which are toxic for reproduction
15. Items which pose a hazard to the environment
16. In the course of normal operations, accidents, leaks, or spills, the item may produce dusts, gases, fumes, vapors, mists, or smokes with one or more of the above characteristics.
17. Compressed gases

HAZARDOUS MATERIAL (HM)

How do I know if something is a hazardous material? (continued)

Water Hazard Class (Wassergefährdungsklasse, WGK):

Classification of substances based on their potential for endangering water resources as outlined below:

WGK 1	Substance with a low hazard rating for water (e.g. Anti-Freeze, Windshield Cleaner)
WGK 2	Substance with a medium hazard rating for water (e.g. Diesel Fuel, Solvents, Heating Oil)
WGK 3	Substance with a high hazard rating for water (e.g. JP8, Waste Oil, Pesticides)

Hazard Class (Gefahrklasse):

A classification of hazard based on the flammability of substances as outlined below:

HAZARD CLASS	FLASH POINT
A I	< 21° C
A II	21° C - 55° C
A III	55° C - 100° C
B	< 21° C and water soluble at 15° C

Typical Hazardous Materials at U.S. Military Activities

Material Name	Hazardous Property	Water Hazard Class
Acetylene Gas	Flammable, Compressed	n/a
Acetone	Flammable, Toxic	1
Adhesives	Flammable, Toxic	2
Ammonia	Corrosive, Irritant	2
Anti-Freeze	Irritant, Toxic	1
Asbestos containing items	Carcinogenic	n/a
Argon Gas	Non-Flammable, Compressed	n/a
Battery Acid	Corrosive, Toxic	1
Brake Fluid	Toxic	3
Break-free/CLP	Irritant, Toxic	3

HAZARDOUS MATERIAL (HM)

How do I know if something is a hazardous material? (continued)

Material Name	Hazardous Property	Water Hazard Class
Carburetor Cleaners	Flammable	1
Calcium Hypochlorite	Corrosive, Oxidizer	2
Carbon Remover	Irritant, Toxic	1
CARC Paint	Toxic, Flammable	3
Chlorinating Kits	Toxic, Oxidizer	2
Chlorine Gas	Toxic, Oxidizer, Compressed	n/a
Cleaning Compounds	Toxic, Flammable	1
Corrosion Inhibitors	Flammable, Corrosive	2
Denatured Alcohol	Flammable	1
Degreasers	Corrosive, Irritant	2
Diesel Fuel	Flammable	2
Dry Cell Batteries	Toxic, Irritant	n/a
Dry Cleaning Solvents	Flammable, Toxic	2
DS2 Decontaminating Agent	Corrosive, Flammable	1
Engine Cleaners	Flammable, Corrosive	1
Epoxy Resins	Flammable	2
Ethanol (Ethyl Alcohol)	Flammable	1
Fertilizers	Toxic	1
Floor Cleaners	Toxic, Ignitable	3
Formaldehyde	Toxic, Corros., Flamm., Carcin.	2
Gasoline (Mogas)	Flammable, Carcinogenic	3
Grease (Lubricant)	Irritant	2
Halon Gas	Non-Flammable, Compressed	n/a
Heating Oil (Light)	Flammable, Harmful	2
Herbicides	Toxic	3
Hydraulic Fluid	Toxic	2
Hydrochloric Acid	Corrosive	1
JP 8	Flammable, Carcinogenic	3
Lacquers	Flammable, Toxic, Irritant	2
Lithium Batteries	Flammable	n/a
Lubricants, Grease	Irritant	2
Methanol (Methyl Alcohol)	Flammable, Toxic	1
Mogas	Flammable, Carcinogenic	3
Oil	Flammable, Irritant	2

HAZARDOUS MATERIAL (HM)

How do I know if something is a hazardous material? (continued)

Material Name	Hazardous Property	Water Hazard Class
Oily Rags/Absorbent	Flammable, Toxic	2
Oxygen Gas	Oxidizer, Compressed	n/a
Paints	Flammable, Toxic	2
Paint Thinner	Ignitable, Toxic	2
Paint Strippers	Flammable, Irritant, Toxic	1
Parts Cleaners	Toxic, Flammable	2
PCBs	Toxic	3
Pesticides	Toxic	3
Phosphoric Acid	Corrosive	1
Photo Chemicals (Fixer)	Corrosive	1
Photo Chemicals (Developer)	Corrosive	1
Primer	Toxic, Flammable	3
Propane Gas	Flammable, Compressed	n/a
Radiator Leak Compounds	Irritant	1
Rust Removers	Corrosive	1
Sealants	Toxic, Flammable	1
Sodium Chloride	Irritant	1
Sodium Hydroxide	Corrosive	1
Solvents	Toxic, Flammable, Irritant	2
STB Super Tropical Bleach	Corrosive, Oxidizer	2
Sulfuric Acid	Corrosive, Toxic	1
Toluene	Flammable	2
Transmission Fluid	Toxic	3
Used/Waste Oil	Flammable, Toxic	3
Varnishes	Flammable, Toxic, Irritant	2
Wax Removers	Flammable	1
Windshield Cleaners	Flammable	1
Wood Preservatives	Flammable, Harmful	2
Zylene	Flammable, Harmful	2

NOTE: The correct classification depends on the contents of the specific product. To determine the correct hazard properties and water hazard classification, it is necessary to check the manufacturer's label or MSDS.

HAZARDOUS MATERIAL (HM)

What are MSDS's and where can I find them?

Chemical manufacturers and importers are required to obtain or develop a form called **Material Safety Data Sheet (MSDS, Sicherheitsdatenblatt)** for each hazardous chemical they produce or import. Distributors are responsible for ensuring that their customers are provided a copy of the MSDS.

The MSDS is a form which contains the following information:

- chemical, physical, and hazardous properties of the product
- fire, explosion, reactivity, and health hazards
- spill or leak procedures
- special protective equipment requirements
- miscellaneous information on how the material should be stored, handled, or labeled

All MSDSs do not all look alike; there are various versions of the form. However, each version contains the same basic information.

At locations where U.S. military or U.S. civilians are required to work with hazardous substances, each work center will maintain a file of MSDSs for each hazardous chemical procured, stored or used at the work center. MSDSs shall be **readily accessible** during each work shift to employees when they are in their work area. (PLEASE NOTE: There shall be no barriers to access – no employee should have to fetch a key, ask a supervisor, submit a request etc.) Each MSDS shall be in English or the predominant language of the workforce.

How do I obtain a Material Safety Data Sheet?

MSDSs are usually issued along with the HM from the source of supply. If the supply point is not able to provide an MSDS then the manufacturer must supply one on request.

Internet Resources for MSDS

The following sites have a large collection of MSDS and are a good place to start your search. Access to some of the addresses may require access from a government computer or an email ending in .gov or .mil.

<http://hazard.com/msds/>

www.dlis.dla.mil/hmrs

<http://www.ilpi.com>

www.denix.osd.mil

www.msdssearch.com

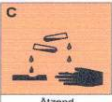





HAZARDOUS MATERIAL (HM)

What are Operating Instructions (Betriebsanweisungen)?

Operating Instructions are workplace-specific instructions that provide information on handling hazardous substances as well as information on risks for human health and the environment associated with the hazardous substance.

At locations where German employees are required to work with hazardous substances, each work center will maintain a file of operating instructions for each hazardous material procured, stored, or used at the work center. The operating instructions shall be provided in German.

Units/activities are responsible for providing the specific Operating Instructions to their employees. Generic Operating Instructions can be obtained from DPW, Environmental Mgmt Division.

293rd BSB Mannheim	Betriebsanweisung Gem. § 20 GEFÄHRSTOFFVERORDNUNG	
Datum: März 2004	Arbeitsbereich:	Werkstatt
Kaserne:	Arbeitsplatz/Tätigkeit:	Reparaturarbeiten / Instandhaltung / Lagerung
Einheit:		
Gefahrstoffgruppe Batteriesäure Mit Wasser verdünnte, Schwefelsäure (in der Regel Konzentrationen bis 50%) zum Befüllen von Bleibatterien, farblos und geruchlos		
Gefahren für Mensch und Umwelt		
 Atzend	<ul style="list-style-type: none">• Verursacht schwere Verätzungen. Bei Kontakt schon nach kurzer Einwirkung Zerstörung von Körpergewebe (Haut, Augen usw.) und Materialien• Dämpfe und Nebel wirken auf Augen, Schleimhäute und Atmungsorgane ätzend• Verschlucken kann zu Gesundheitsschäden führen.• Reagiert mit Wasser und Laugen unter Wärmeentwicklung (Spritzgefahr!)	
Schutzmaßnahmen und Verhaltensregeln		
	<ul style="list-style-type: none">• Bei der Arbeit geeignete Schutzkleidung, Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen• Berührung mit den Augen und der Haut vermeiden• Behälter dicht geschlossen halten• Behälter mit Vorsicht öffnen und handhaben	
Verhalten im Gefahrenfall		
	<ul style="list-style-type: none">• Unbeabsichtigte Freisetzung: Verschüttete/ausgelaufene Säure mit Bindemittel aufnehmen oder mit Neutralisationsmittel behandeln. In vorgesehenen Behälter entsorgen. Dabei Schutzbrille und Schutzhandschuhe tragen. NOTRUF: 117 (BSB Fire Department) NÄCHSTES TELFON:	
Erste Hilfe		
	<ul style="list-style-type: none">• Augenkontakt: Augenspülflasche verwenden, danach möglichst 15 min mit Wasser weiterspülen, sofort Augenarzt aufsuchen• Hautkontakt: Sofort mit viel Wasser waschen, benetzte Kleidung sofort ablegen, Arzt aufsuchen• Bei Einatmen von Nebeln oder Gasen an frische Luft bringen, Arzt aufsuchen• Bei Verschlucken kein Erbrechen herbeiführen. Nach Verschlucken sofort Mund ausspülen und reichlich Wasser nachtrinken, sofort ärztlichen Rat einholen• Nach Einatmen von Säurenebel für Frischluftzufuhr und Ruhe sorgen. NOTRUF: 117 (BSB Fire Department) NÄCHSTES TELFON:	
Sachgerechte Entsorgung		
	Säuregefüllte Altbatterien in einem säureresistenten, verschleißbaren und gekennzeichneten Behälter sammeln und am HWAP bis zur ordnungsgemäßen Beseitigung zwischenslagern	
Zusätzlich zu beachten Spezielle Informationen hinsichtlich der möglichen Gefahren für Mensch und Umwelt sowie zu den Gefährlichkeitsmerkmalen der einzelnen Gefahrstoffe sind zusätzlich den entsprechenden Sicherheitsdatenblättern (MSDSs) der einzelnen Stoffe zu entnehmen. Für weitere Hinweise siehe auch „Allgemeine Betriebsanweisung“.		

HAZARDOUS MATERIAL (HM)

What are the labeling requirements for HM containers?

U.S. Origin Containers

All hazardous materials on DoD installations of U.S. origin will have a Hazardous Chemical Warning Label in accordance with DoD 6050.5-H. These requirements apply throughout the life cycle of these materials.

When a container is labeled by the manufacturer, the label will provide the following information:

- Chemical/Common Name of the material
- National Stock Number (NSN) or Local Stock Number (LSN)
- Hazardous Property (e.g. flammable, corrosive)
- Symbol for Hazardous Property
- Health Hazards
- Safety Precautions
- Transportation Data
- Shelf-Life Data
- Manufacturer's Identification (Name, Address, Phone Number)

NON-U.S. Origin Containers

All containers of hazardous materials and preparations, including compressed gas cylinders, must be labeled in **German and English** with the following:

- the internationally recognized name of the substance
- the UN number
- the name, complete address and telephone number of the manufacturer, importer or distributor/seller in charge
- the Hazard Symbol (Gefahrensymbol)
- the Hazard Definition (Gefahrenbezeichnung)

For specific hazardous materials R and S Phrases are required to be indicated on the label. For details please see German FGS, Table C5.T6.

When HM is stored in containers other than the ones they came in, the new container must be labeled with at least the common name (i.e. Thinner), the hazardous property (flammable) and the symbol for the hazardous property.

If a container is to be reused, the old labels must be removed or obliterated.

HAZARDOUS MATERIAL (HM)





What are the labeling requirements for HM containers? (continued)

To re-label containers, stencils, spray paint, or a permanent marker may be used to write on the container. The label can consist of process sheets, batch tickets, or other written materials.

If the container is stored outdoors, the label must withstand the effects of rain, snow, and sun.

- Never use food containers for hazardous material storage!

Below Hazardous Chemical Warning Label meets the DoD 6050.5-H labeling requirements for U.S. origin containers.

HAZARDOUS CHEMICAL WARNING LABEL					
1. CHEMICAL / COMMON NAME					
2. HAZARD CODE		3. NSN / LSN			
4. PART NUMBER					
5. ITEM NAME					
6. HAZARDS (X all that apply)		(1) Acute (Immediate)			(2) Chronic (Delayed)
		NONE	SLIGHT	MODERATE	SEVERE
a. HEALTH					
b. CONTACT					
c. FIRE					
d. REACTIVITY					
7. SPECIFIC HAZARDS AND PRECAUTIONS (Including Target Organ Effects)					
(See MSDS for further information)					
8. PROTECT (X all that apply)		a. EYES		b. SKIN	c. RESPIRATORY
9. CONTACT: a. COMPANY NAME					
b. ADDRESS (Street, P.O. Box, City, State, Zip Code and Country)					
c. EMERGENCY TELEPHONE NUMBER (Include Area Code)					
10. PROCUREMENT YEAR FOR HAZARDOUS CHEMICAL					

DD Form 2522, DEC 88

The self-adhesive labels can be ordered thru Publications as DD Form 2521 (8.5" x 11") and as DD Form 2522 (4.5" x 6").

HAZARDOUS MATERIAL (HM)

What are the labeling requirements for HM containers? (continued)

Hazard Symbols and Hazard Definitions for Non-U.S. origin containers



Toxic



Very Toxic



Irritant



Harmful to Health



Oxidizing



Highly Flammable



Extremely
Flammable



Explosive



Corrosive



Harmful to the
Environment

These labels can be obtained from the internet at:
<http://www.chemie.de/tools/sicherheit/Gefahrensymbole.php3>

HAZARDOUS MATERIAL (HM)

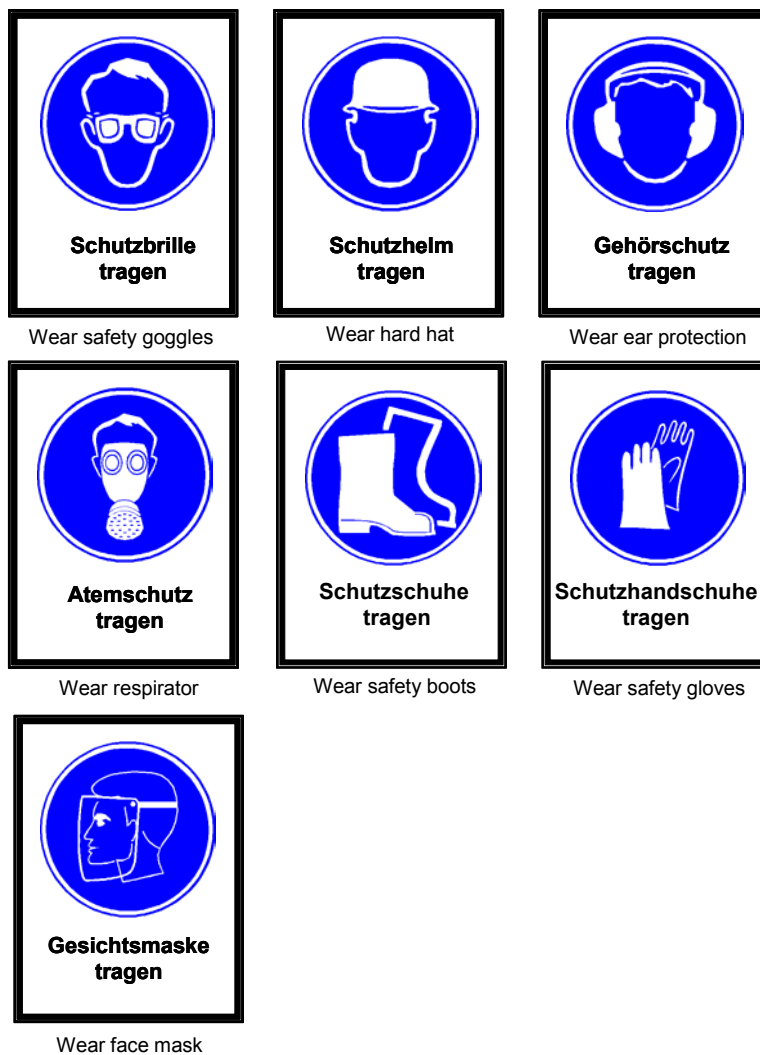
What are the labeling requirements for HM Storage and Handling Areas?

Mandatory signs (Gebotszeichen) and **Hazard signs (Warnzeichen)** must be placed at workplaces where hazardous materials are handled and/or stored.

Smoking is prohibited in areas where flammable materials are stored and/or handled. These areas must be labeled with **No Smoking signs (Prohibitory signs/Verbotszeichen)**.

The signs attached outside of the facility must be large enough to be read from 7.5 meters (25 feet) away. All signs must be both in English and German.

Mandatory Signs (Gebotszeichen)



HAZARDOUS MATERIAL (HM)

What are the labeling requirements for HM Storage and Handling Areas? (continued)

Hazard Signs (Warnzeichen)



Warning!
Flammable Substances



Warning!
Explosive Substances



Warning!
Toxic Substances



Warning!
Corrosive Substances



Warning!
Combustible Substances



Warning!
Harmful to Health or
Irritant Substances



Warning!
Pressurized Gas Bottles



Warning!
Danger from Batteries



Warning!
Explosive Atmosphere

HAZARDOUS MATERIAL (HM)

What are the labeling requirements for HM Storage and Handling Areas? (continued)

Prohibitory Signs (Verbotszeichen)



No Smoking

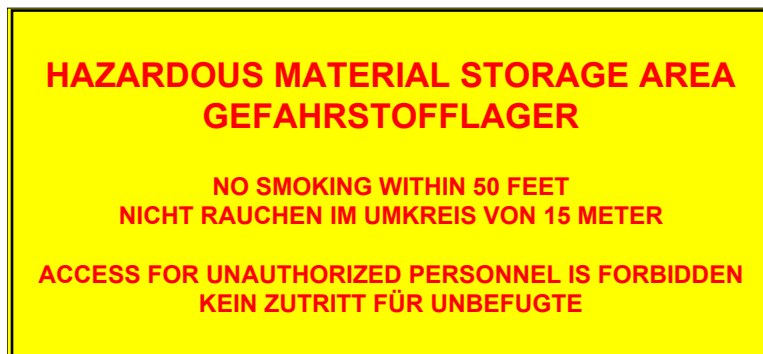


No Fire, Open Flame,
Smoking



No access for
unauthorized personnel

HMSA Signs



Emergency Telephone Numbers	
Fire Department	117
Ambulance	116
Police	114
DPW	380-1560
Unit POC	_____
Installation Cdr	_____

HAZARDOUS MATERIAL (HM)

Where do I get the required HM labels and signs?

- Signs and labels can be bought of various materials and sizes on the economy, e.g. thru Firm Nibler, 69190 Walldorf, Phone 06227-83930, www.nibler.net
- The Directorate of Public Works (DPW) can also obtain signs and labels for the activity/unit, [if unit provides a DA Form 4283](#), Facilities Engineering Work Request, to the DPW, ERMD Branch.
- The Hazardous Material Reuse Center (HMRC) at Spinelli Barracks, Bldg #1560, Bay 5, DSN 384-6607/6606, provides the following labels and placards when in stock:
 - Square, 4x4", self-adhesive HM stickers, Class 1 – 9, for individual container labeling.
 - Square, 10x10", vinyl and self-adhesive HM placards, Class 1 – 9, for Transportation units.
 - Mandatory signs, Hazard signs, and Prohibitory signs can be printed out from a downloaded file.
- Small quantities of Hazard Signs, Prohibitory Signs, and HMSA Signs can be obtained from DPW, Environmental Management Division (when in stock).

HAZARDOUS MATERIAL (HM)

How do I properly store HMs?

Compatible Storage

The most important thing to remember is to ensure **compatible storage**. What exactly does this mean? Certain substances produce a reaction if they are mixed together. It is important to keep these substances away from each other to avoid violent reactions.

The general rule is to keep **each** of the **four major types** of HM (**IGNITABLE, CORROSIVE, TOXIC, and OXIDIZER**) **separated from each other!**

Proper separation must be done either via firewalls, aisles (at least 2 meters/6 feet of open space), or placement in separate buildings. Small quantities can be stored in separate safety cabinets or on separate containment pallets of the storage area.

If a HM has more than one hazardous property the physical hazard (i.e. ignitable) is usually more important than the biological hazard (i.e. toxic). *The section "Reactivity Data" of the MSDS specifies which materials are not compatible.*

Note / Exceptions:

- Noxious materials can be stored with toxic materials.
- Biological irritant materials can also be stored with toxic materials.
- Irritant materials which are mild acids and bases shall be stored with similar corrosives
- Acids and Bases are both corrosive. However, acids and bases almost always react violently with each other and should always be stored separately.
- DS2 and STB are both corrosive, but they are **not** compatible and can cause an explosion if mixed. They **must** be stored in separate storage areas/rooms.
- Organic Reactives must be separated from Inorganic Reactives (metals).

HAZARDOUS MATERIAL (HM)

How do I properly store HMs? (continued)

Container Management at Storage Areas

- HM containers must be stored/used in the order of dates of manufacture, with the oldest material being used first = FIFO (First In First Out) Rule. Expired materials must be re-tested for serviceability. New shelf-life dates must be marked on **each** container.
- HM containers must be handled carefully and not in a manner that may damage the label and rupture the container or cause it to leak.
- HM containers must be tightly sealed except when contents are transferred or applied.
- Drip pans/absorbent materials must be placed under containers as necessary to collect drips or spills
- Containers that **contain flammable liquids or non-flammable but water endangering liquids** **must** be placed in a **proper secondary containment** (e.g. spill containment pallet, drip pan). Secondary containment must be suitable for the stored substance.
- The secondary containment volume must be at least 10% of the total liquid volume stored and 100% of the total volume of the largest container.

For example: 1 ea 5 gal can + 2 ea 55 gal drums (= 115 gal total)

10% = 11.5 gal

Largest container = 55 gal

Required volume = 55 gallons

PLEASE NOTE: When storing HMs in a Water Protection Zone (WPZ), the required volume of the secondary containment must always be 100% of the stored liquid.

The following installations are located in the WPZ:

Benjamin Franklin Village, Friedrichsfeld, Lampertheim Training Area, Sullivan Barracks, Taylor Barracks.

HAZARDOUS MATERIAL (HM)

How do I properly store HMs? (continued)

Container Management at Storage Areas

- A **hazardous material inventory** of **all** containers (including cylinders, above ground tanks, and underground tanks) available at the storage area must be posted.
 - *Page 21 provides a sample of a HM inventory.*
- HM containers must be inspected **WEEKLY** for proper labeling, expired materials, signs of leaks or spills, deterioration, securely fastened valves and bungs, and proper segregation. Weekly inspections must be conducted **in writing**. The inspection log must be kept for a minimum of **one year**.
 - *Page 22 provides a sample of a HM weekly inspection checklist.*
- **It is prohibited** to store combustible cardboards, paper, textile, wood, etc. in flammable storage areas. **Wooden pallets are only authorized if they are flame resistant.**
- **It is prohibited** to store flammables/combustibles in staircases, escape routes, basements, rooftops or attics, and passageways for personnel and vehicles.
- **Outside** storage of HM containers shall be minimized as much as possible. The chemical characteristics of some materials can change by extreme temperatures, making them unsuitable for their original purpose.

Container Management at Work Areas

- **Daily-use quantities** may only be stored in work areas, do not store more than one day's needs.
- Daily-use quantities of flammable substances may only be stored in work areas if they are placed in appropriate **safety cabinets**.
- Toxic and very toxic materials must be stored and secured so that only qualified persons can access these materials.

HAZARDOUS MATERIAL (HM)

How do I properly store Compressed Gas Cylinders?

- Compressed gas cylinders for welding or for liquid fuel must be kept away from open flames and heat sources at all times.
- Compressed gas cylinders must be adequately secured to prevent falling.
- **No Smoking** signs must be posted in and around compressed gas storage areas.
- Compressed **gas cylinders for welding** may not be stored in
 - stairways and halls of buildings
 - garages
 - near stairs in outdoor facilities or near emergency escape routes
 - in, or in the immediate vicinity of, narrow yards and passages
 - in the immediate vicinity of highly flammable substances
 - residential rooms and rooms open to the public
 - areas without sufficient ventilation
- Compressed **gas cylinders for liquid fuel** must be secured against mechanical damage and heat. Storage in stairways, halls narrow passageways, and in their immediate vicinity is only permitted on a **temporary basis** if this is required for the continuation of the work.
- **Acetylene** and **Oxygen** compressed gas cylinders must be **stored separately**, at least 15 meters (50 feet) apart.
- For storage and handling purposes all cylinders will be considered full.



HAZARDOUS MATERIAL (HM)

Where can I get storage equipment for HMs?

Secondary containment pallets, safety cabinets, safe module containers, safe tanks, drip pans etc. can be bought in various materials and sizes

- On the economy, e.g. thru Firm Soho Facilities Mannheim, 68307 Mannheim, Phone 0621-4314260, Fax 0621-4314261.
- From the US, e.g. Firm New Pig, at www.newpig.com

Units must buy their own storage equipment or secondary containment and use unit funds.



HAZARDOUS MATERIAL (HM)

How do I extend the shelf life of expired HMs?

- **Remember:**

HM containers must be stored/used in the order of dates of manufacture, with the oldest material being used first = FIFO (First In First Out) Rule. Expired materials must be re-tested for serviceability. New shelf life dates must be marked on **each** container.

If the expiration has been exceeded the following sources should be used to obtain new expiration dates:

- Contact the Supply Support Activity where the HM was obtained and ask whether the expiration date has been or can be extended.
- The shelf life home page is also an excellent source for getting new expiration dates for POL products.
<http://www.shelflife.hq.dla.mil>
- The Material Testing Laboratory of Mannheim Laboratory Center (MLC) at Coleman Barracks, Bldg #52, DSN 382-4115/5221 provides shelf life item surveillance and testing on a variety of HMs.
- The Hazardous Material Reuse Center (HMRC) at Spinelli Barracks, Bldg #1560, Bay 5, DSN 384-6607/6606, provides shelf life information for HMs and also can submit samples for testing to extend the shelf life.

Unit personnel shall mark the new shelf life date on each container by using one of the following methods:

- ◇ Obtain DD Form 2477-2 or DD Form 2477-3 thru Supply channels, complete the label with the new shelf life date and stick the label on the container.
 - ◇ A permanent marker can be used to write the new shelf life date on the container.
 - ◇ Unit can also develop their own extension label, write the new shelf life on it and mark the container with the label.
- **If a Hazardous Material cannot be extended it has to be handled/ disposed off as a Hazardous Waste.**

HAZARDOUS MATERIAL (HM)

What do I need to know about the HM Inventory?

A **detailed inventory of all hazardous materials** at the storage, distribution, and handling locations must be prepared and a copy must be provided to the DPW Environmental Mgmt Division as well as to the Fire Department. A copy must also be placed at the HM storage area.

(A listing of typical HMs used at U.S. Military Activities is provided on pages 3-5 of this handbook.)

The HM inventory must be **updated annually** or **after any significant change in the amounts or types of HMs stored or used**.

Below is a sample of what a typical inventory sheet should look like. (The Excel Worksheet can be obtained from DPW, EMD.)

HAZARDOUS MATERIALS INVENTORY

Installation: _____ Building #: _____ Date of Inventory: _____

Unit/Activity: _____ Unit Environmental Coordinator: _____

Storage Location (be specific): _____

Material Name	NSN	Hazard Category (Flammable, Corrosive, Toxic, Compressed etc.)	Water Hazard Class	Quantity on hand	Max. stock on hand

HAZARDOUS MATERIAL (HM)

How do I document HM Storage Area (HMSA) Inspections?

- Remember:**

HM containers must be inspected **WEEKLY** for proper labeling, expired materials, signs of leaks or spills, deterioration, securely fastened valves and bungs, and proper segregation. Weekly inspections must be conducted **in writing**. The inspection log/checklist must be kept for a minimum of **one year**.

Below is a sample of what a typical **HM Inspection Checklist** should look like.
(The Excel Worksheet can be obtained from DPW, EMD.)

WEEKLY HM INSPECTION	YEAR:	MONTH:						
	Week 1	Week 2	Week 3	Week 4	Week 5			
Proper HMSA signs (dual language) available ?								
HMSA secured ?								
Are the shelf life of the HMs still valid ?								
Are expired HMs available ?								
New test dates written on all containers ?								
Required Safety Equipment available ?								
Required Spill Equipment available ?								
Fire Extinguisher available ?								
Are containers correctly labeled ?								
All lids secured ?								
Are containers dented or rusted ?								
Is secondary containment available ?								
Signs of leak or spill ?								
HM inventory posted ?								
Comments:								
Unit/Activity:		Installation:						
UEC:		Building:						

HAZARDOUS MATERIAL (HM)

How do I turn in excess/serviceable HMs?

- FIRST STEP:**

Contact the **Hazardous Material Reuse Center (HMRC) at Spinelli Barracks.**

What is the Reuse Center(HMRC)?

The HMRC is a facility which accepts, redistributes, and provides shelf-life extension services for excess hazardous material (HM). The center redistributes materials to users at no cost.

Who can use the center?

All military, civilian organizations, and other DoD activities within the 26th ASG.

Why should I use it?

- The HMRC reduces stockpiling of HM at the user's level
- Reduces health and safety hazards (including commander liability) associated with HM management
- Hassle free turn in of HM
- Units can get free material

How do I use it?

Stop by or call the center for information!!!

Items Accepted

FSC	Title
6135 –	Batteries, non-rechargeable
6810-	Chemicals, Naphtha Solvents
6850-	Miscellaneous Chemical Specialties
7930-	Cleaning Compounds, Detergent
8010-	Paints, Dopes, Varnishes, and related products
8030 –	Preservative and Sealing compounds
8040 –	Adhesives
9150 –	Oils, Greases: Cutting, Lubricating and Hydraulic Fluids

Items not Accepted

- ❖ Radioactive Material
- ❖ Infectious Substances
- ❖ Ammunition and explosives
- ❖ Expired shelf life Material
- ❖ Chemical Defense Equipment (CDE Kits, STB, DS2)
- ❖ Drugs and biological waste

26th ASG DOL
Hazardous Material Reuse Center (HMRC)
Spinelli Barracks, Bldg 1560, Bay 5

HMRC Manager: George Spears
DSN: 384-6607/6606 CIV: 0621-730-6607/6606
email: george.spears@26asg.heidelberg.army.mil
FAX DSN: 384-6608 CIV: 0621-730-6608

HMRC Operating Hours

Turn-in and Issue
0800-1500 Monday – Friday

Screening Property
0800-1600 Monday – Friday

HAZARDOUS MATERIAL (HM)

How do I turn in excess/serviceable HMs? (continued)

- **SECOND STEP:**

If the HMRC **does not accept** your excess/serviceable HMs (e.g. because the shelf life could not be extended) contact the **DRMO Coleman Conforming Storage Facility (CSF)**

What is the DRMO Coleman CSF?

- The Coleman Conforming Storage Facility is a "Field Facility" for the DRMO Kaiserslautern. Coleman CSF accepts, and re-issues excess hazardous material (HM). The facility redistributes HMs to users at no cost.

Who can use the DRMO Coleman CSF?

- All military and civilian organizations and other DoD activities within the 26th ASG.

Why should I use it?

- The Coleman CSF reduces stockpiling of HM at the user's level
- Reduces health and safety hazards (including commander liability) associated with HM management.

Operating Hours:

0730-1600 Monday – Friday

Location:

Bldg #120 (Warehouse) and Bldg #121 (Admin Office) are Located next to the former Class III Point of Coleman Barracks

POC:

Mr. Rob Bailey
DSN: 382-4398
CIV: 0621-779-4398
Fax: 382-4138
Email: Robert.Bailey@dla.mil

Items not accepted: Radioactive waste, unsalable material of a non-hazardous nature, classified documents, refuse and trash, property containing information covered by the Privacy Act, Hazardous Property designated for disposal by the Military Services that does not have RTDS capability.

For detailed information please refer to the DRMO Kaiserslautern Customer Assistance Handbook, dated 1 June 2002.

- **NOTE:**

DRMO Coleman CSF will require a DD Form 1348-1A Turn-in document for turn-in of excess/serviceable HMs. A sample of a DD 1348-1A is provided on page 25.

HAZARDOUS MATERIAL (HM)

How do I turn in excess/serviceable HMs? (continued)

- SECOND STEP continued:**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1. TOTAL PRICE										2. SHIP FROM 123 Trans Bn APO AE 12345										3. SHIP TO DRMO Kaiserslautern Coleman CSF																																																																															
UNIT PRICE										DOLLARS										CTS																																																																															
DOLLARS										CTS										4. MARK FOR HM UNUSED																																																																															
5. DOC DATE										6. NMFC										7. FRT RATE										8. TYPE CARGO										9. PS																																																											
10. QTY. REC'D										11. UP										12. UNIT WEIGHT										13. UNIT CUBE										14. UFC										15. SL																																																	
16. FREIGHT CLASSIFICATION NOMENCLATURE CORROSIVE																																																																																																			
17. ITEM NOMENCLATURE DECON APPARATUS, PORTABLE, 14 LITERS																																																																																																			
18. TY CONT 14 L										19. NO CONT 10										20. TOTAL WEIGHT										21. TOTAL CUBE																																																																					
22. RECEIVED BY																				23. DATE RECEIVED																																																																															

REQUISITIONER: W 8 1 C J X

DATE / SERIAL: _____

FIRST DESTINATION ADDRESS: W K 4 V 1 D

NSN: 4230-01-133-4124

Manufacturer: ALL-BANN Enterprises Inc

MSDS Serial No.: ABCDEF

UNIT POC: SGT JOHN DOE

PHONE: 381-1234

INSTALLATION: TAYLOR BKS

BLDG #: 123

FOR SERVICEABLE MATERIAL : BCAN FOR USAREUR RESOURCE RECYCLING AND RECOVERY PROGRAM:
21F 3875.111 890000 S91533 AE90

I CERTIFY THAT THIS PROPERTY IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED IAW THE FGS.

- After completion of DD1348-1A contact the DPW EMO, DSN 381-8447 for verification.
- After review of the DD1348-1A by DPW EMO personnel, contact Coleman CSF personnel for the pre-inspection and turn-in appointment.

**The Coleman CSF Field Facility has been closed
effective 09 December 2005.**

**The DRMO staff can be reached at
Kaiserslautern: DSN 483-7448 or DSN 483-7748
Germersheim: DSN 378-3883 or DSN 378-3703**

The main body of this handbook is organized in sections based on questions asked frequently. This method allows you to use sections independently that best suit your needs.

CHAPTER 2

HAZARADOUS WASTE

TABLE OF CONTENTS

	Page
How do I know if something is a Hazardous Waste (HW)?	27
Where can I get Hazardous Waste Profile Sheets?	28
How do I determine what labels or signs I need for HW	29-30
Where do I get the required HW labels and signs?	30
How do I properly store HW?	31-32
Where can I get overpack containers for HW?	32
How do I properly segregate HWs	33
How do I document HW container/area inspections?	34
How do I identify an unknown or mixed HW?	35
How do I dispose of used/unserviceable HW?	36-39
Where are the approved HWAPs/Tanks located?	40-42
How Do I identify the fill status of a tank?	43

HAZARDOUS WASTE (HW)

How do I know if something is a hazardous waste?

There are several places to look that will give you an indication if something is hazardous. Check the label on the container or look at the Material Safety Data Sheet for clues.

Hazardous Waste (Sonderabfall/ueberwachungsbeduerffiger Abfall):

- A hazardous waste is a hazardous material that is **expired, contaminated,** or otherwise **no longer suitable for its original purpose.**
- HM being stored in leaking or deteriorated containers is also defined as HW.
- If a HM has failed the reutilization, transfer, or sales cycles by DRMO, it will also be disposed of as a HW.
- Those wastes that are specifically designated as HW in Europe are listed on Table C6. T3 of the German Final Governing Standards (FGS).

Hazardous Waste Accumulation Point (HWAP):

A location where HWs are accumulated until removed to a Hazardous Waste Storage Area (HWSA) or transported for treatment and disposal. A **HWAP** may **be used to accumulate no more than one container per waste stream** as specified for the particular waste stream in the ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road).

(A listing of the authorized HWAPs within the Mannheim Garrison is provided on pages 40 – 42.)

Hazardous Waste Storage Area (HWSA):

One or more locations on a DoD installation where HW is collected and stored prior to shipment for treatment or disposal. At a **HWSA more than one container** as specified for the particular waste stream in the ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road) **may be accumulated.** The only authorized HWSA at the Mannheim Garrison is the DRMO, Coleman Conforming Storage Facility.

Hazardous Waste Log:

A listing of HW deposited and removed from a HWSA. Information such as the waste type, volume, location, and storage removal dates should be recorded.

Hazardous Waste Profile Sheet (HWPS):

A document that identifies and characterizes the waste by providing details of the physical, chemical, and other descriptive properties of the waste, the user's knowledge of the waste, and/or lab analysis.

HAZARDOUS WASTE (HW)

Where can I get Hazardous Waste Profile Sheets (HWPS)?

- ◇ Defense Reutilization and Marketing Office (DRMO) Kaiserslautern require activities to provide a HWPS with the turn-in of each initial waste stream and once a year thereafter. After the initial turn-in of the waste, turn-ins of identical waste will not require a HWPS; instead, generators will enter a DRMO assigned HWPS reference number in block 27 of the DD1348-1A. DRMO personnel will provide blank HWPS and assistance in completion of the form.
- ◇ The DPW EMO has current HWPS available for the HW generators of the Mannheim Garrison for HW streams removed by the HW contractor, Firm Sued-Muell.
DPW EMO will provide assistance in completion of the form.

Below is a sample of a typical completed HWPS:

HAZARDOUS WASTE PROFILE SHEET – GERMANY		
PART A – GENERAL INFORMATION		
1. WASTE PROFILE NO. (assigned by DRMO): WB1CJX-0400		
2. UNIT NAME: 293d BSB, DPW, EMD		3. MILCOM: Mannheim Communities
4. INSTALLATION: see attached listing		5. BUILDING: see attached listing
6. MAILING ADDRESS: 293d BSB Mannheim ATTN: DPW, Environmental Mgmt Division Unit # 29901 APO AE 09086		
7. TECHNICAL CONTACT: Sabine P. Feilhauer Environmental Protection Specialist 381-6447		
PART B – WASTE CHARACTERIZATION		
1. Name of Waste: Batteries, Lithium		CLIN # N0400
2. Waste Key Number: 160605		3. Projected Annual Volume: _____
4. Process Generating Waste: _____		
5. Physical/Chemical Characteristics (Optional Data): Color: _____ Density: _____ Total Solids: _____ Layering: _____ Multilayered _____ Bilayered _____ Single Phase _____ Vapor Pressure at 30C: _____ (in bars) Thermal Value: _____ (kJ/kg)		
6. Physical/Chemical Characteristics (Required): Physical State: <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Semi-Solid <input type="checkbox"/> Gas <input type="checkbox"/> Other Flash Point (F): N/K Water Solubility: N/P (%) pH: 7.0 Reactivity: <input checked="" type="checkbox"/> Water <input type="checkbox"/> Cyanide <input type="checkbox"/> Sulfide Melting Point: N/K Boiling Point: N/K		
7. Country Specific Toxic Constituents: (see attachment)		
8. Composition:		
Component	Concentration	Range
Sulfur Dioxide (SARA III)	30 %	
Acetonitrile (SARA III)	10 %	
Lithium	4 %	

DRMR-E-Form Nov 91 (New)

TOXIC CONSTITUENTS – GERMANY		
SUBSTANCE OR CONTAMINANT	TOTAL CONCENTRATION (mg/kg)	EXTRACT CONCENTRATION (mg/L)
Arsenic	_____	_____
Lead	_____	_____
Cadmium	_____	_____
Chromium (VI)	_____	_____
Copper	_____	_____
Nickel	_____	_____
Mercury	_____	_____
Zinc	_____	_____
Cyanide	_____	_____
Ammonia (NH4)	_____	_____
Sulfates (SO4)	_____	_____
Nitrites (NO2)	_____	_____
Sulfur	X	_____
Fluorine	_____	_____
Chlorine	_____	_____
Bromine	_____	_____
Iodine	_____	_____
PCB	_____	_____

INSTRUCTIONS:
This is a list of chemical constituents that are of particular importance for the waste disposal industry in Germany. If this section is left blank, the generator is certifying that these constituents are not present in detectable levels.

LIQUID WASTES:
Give the actual concentration in the first column of this attachment (or on page 1, Part B, No. 8). Report the concentration in mg/kg or percent.

SOLID OR SEMI-SOLID WASTE:
If the waste is a solid or semi-solid and contains a chemical substance with a line in the second column, the generator must provide laboratory results for that chemical using the eluate tests prescribed in Annex B, paragraph 3, of the German Federal Waste Law (TA Abfall). Report the concentration of the chemical in the eluate or extraction in mg/L.

PART C – GENERATOR CERTIFICATION		
Sources of Information: ☐ Chemical Analysis (attach test results) ☒ User Knowledge (attach supporting documents) **MSDS # BGLHS** **Genehmigungsnummer VSGSMT020032**		
I, S. Feilhauer, hereby certify that all information submitted in this and all attached documents is to the best of my knowledge an accurate representation of the waste turned in to the DRMO. All known or suspected hazards have been disclosed.		
Sabine P. Feilhauer Signature of Generators Representative	03 May 2005 Date	

HAZARDOUS WASTE (HW)

How do I determine what labels or signs I need for HW?

When **HW is stored in containers**, the container must be labeled with at least the words "**HAZARDOUS WASTE**", the common name (i.e. Used Thinner), the hazardous property (flammable) and the symbol for the hazardous property.

- Hazard Symbols are provided on page 10 of this handbook.

Below is a sample of a typical **HW label for HW containers at a motor pool or shop**. Please note that the hazard symbol must be placed next to the label, e.g. for Empty Metal Cans the "F" sign for Highly Flammable.



HW collection containers **which have been provided by a HW removal contractor** will be labeled by the contractor.



HAZARDOUS WASTE (HW)

How do I determine what labels or signs I need for HW? (continued)

Signs for **Hazardous Waste Accumulation Points (HWAP)** are shown below and must be legible from a distance of at least 7.5 meters (25 feet).



Where do I get the required labels and signs?

- Signs and labels can be bought in various materials and sizes on the economy, e.g. thru Firm Nibler, 69190 Walldorf, Phone 06227-83930, www.nibler.net
- The Directorate of Public Works (DPW) can also obtain signs and labels for the activity/unit, [if unit provides a DA Form 4283](#), Facilities Engineering Work Request to the DPW, ERMD Branch.
- Small quantities of Hazard Signs, Prohibitory Signs, and HMSA Signs can be obtained from DPW, Environmental Management Division (when in stock).

HAZARDOUS WASTE (HW)

How do I properly store HW?

Container Management

- HW containers must be handled carefully and not in a manner that may damage the label and rupture the container or cause it to leak.
- Containers must be tightly sealed except when adding or removing HW.
- Drip pans/absorbent materials must be placed under containers as necessary to collect drips or spills. **Rainwater** captured in secondary containment areas should be inspected and/or tested prior to release.
- Containers that **contain flammable liquids or non-flammable but water endangering liquids** **must** be placed in a **proper secondary containment** (e.g. spill containment pallet, drip pan). Secondary containment must be suitable for the stored substance. When **transferring liquid** from one container to another the containers must be **grounded**.
- The secondary containment must be sufficient to hold 10% of the total HW volume, or 100% of the total volume of the largest container, whichever is greater.
- HW must not be stored in an unwashed container that previously held an incompatible waste or material.
- **Hazardous wastes generated at multiple areas within a HWAP, e.g. within shops or motor pools, shall be removed on a DAILY basis to a designated HWAP or HWSA.**



HW collection point at a motor pool



HWAP near the motor pool

HAZARDOUS WASTE (HW)

How do I properly store HW? (continued)

Tank Systems

At least once **EACH OPERATION DAY**:

- The above-ground portions of the tank system must be inspected, to detect corrosion or releases of waste.
- Data must be gathered from monitoring and leak detection equipment (e.g. pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.
- The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system must be inspected to detect erosion or signs of releases of HW (e.g. wet spots, dead vegetation).

Inspections must be conducted **in writing**. The inspection log/checklist must be kept for a period of **three years**.

- *Page 34 provides a sample of a HW daily inspection checklist.*



above ground tank



underground tank

Where do I get overpack containers?

- Small quantities of overpack containers (sizes vary from 30 liter containers up to 220 liter containers) can be ordered thru DPW, Environmental Management Division. A simple letter (memo style) explaining why and how many containers are needed is sufficient.

HAZARDOUS WASTE (HW)

How do I properly segregate HW?

- **The most important thing to remember is to ensure compatible storage.**

The general rule is to keep **each** of the **four major types** of HM (**IGNITABLE, CORROSIVE, TOXIC, and OXIDIZER**) **separated from each other!**

- Incompatible wastes and materials must not be placed in the same container and must be stored and disposed of separately.
- Mixing waste categories is not permitted!
- Only one container per waste stream is allowed in the HWAP or the HW collection point of a shop or motor pool.

The following HW streams must be separated, even though they fall under the same waste category.

- ◇ **AEROSOL CANS:** various types, full or empty, (i.e. Lacquer, Deicing Fluid, and Cleaning Solutions) can be mixed in the same container. **Aerosol cans containing Polyurethane Foam or Pesticides** must be collected in **separate containers**.
- ◇ **BATTERIES:** dry cell batteries (Alkaline, Carbon Zinc and Manganese) can be mixed in the same container. **Lithium, Magnesium, Ni-Cad, and Mercury Batteries** must be collected in **separate containers**.
- ◇ **EMPTY METAL CANS:** aerosol cans shall not be mixed with empty metal cans unless they are **punctured**.
- ◇ **PAINT:** non-halogenated paint and CARC/Polyurethane paint must be collected in separate containers.
- ◇ **POL Liquids:** Brake Fluid, Hydraulic Fluid, Waste Oil, and Waste Fuel cannot be mixed with each other. Waste Mogas and Waste JP8 may be mixed with each other.
- ◇ **SOLVENTS:** non-halogenated solvents and halogenated solvents must be collected in separate containers.
- ◇ **LIQUID substances** and **SOLID substances** shall not be mixed!

HAZARDOUS WASTE (HW)

How do I document HW container/area inspections?

- Remember:**

Inspections must be conducted **in writing**. The inspection log/checklist must be kept for a period of **three years**.

Below is a sample of what a typical **HW Inspection Checklist** should look like.
(The Excel Worksheet can be obtained from DPW, EMD.)

DAILY HW INSPECTION	YEAR:							
MONTH:								
	1	2	3	4	5	6	7	
Proper HWAP signs (dual language) available ?								
HWAP secured ?								
All lids secured ?								
Are containers correctly labeled ?								
Signs of leak or spill ?								
Is secondary containment available ?								
Required Spill Equipment available ?								
Required Safety Equipment available ?								
Fire Extinguisher available ?								
TANKS:								
Corrosion on above ground portion visible?								
Signs of leak or spill ?								
Leak detection devices functioning?								
Is secondary containment available ?								
Comments:								
Unit/Activity:					Installation:			
Unit Env. Coord:					Building:			

HAZARDOUS WASTE (HW)

How do I identify an unknown or mixed HW?

Unknown or **mixed** HW can be identified by submitting a sample of the HW to the Material Testing Laboratory of Mannheim Laboratory Center (MLC) at **Coleman Barracks, Bldg #52, DSN 382-4115/5221.**

The laboratory will offer advice and assistance on sample preparation, packaging, and delivery. Samples shall be forwarded in their original containers to the laboratory. If this is not possible, contact the laboratory for further information on how to submit these samples.

Each sample shall be accompanied by a properly filled DD 1222. Blank forms are available at the laboratory.

REQUEST FOR AND RESULTS OF TESTS	PAGE NO.	NO. OF PAGES	
SECTION A - REQUEST FOR TEST			
1. TO: (Include ZIP Code)		2. FROM: (Include ZIP Code)	
3. PRIME CONTRACTOR AND ADDRESS (include ZIP Code)		4. MANUFACTURING PLANT NAME AND ADDRESS (include ZIP Code)	
CONTRACT NUMBER 5. END ITEM AND/OR PROJECT		P.O. NUMBER 7. LOT NO. 8. REASON FOR SUBMITTAL 9. DATE SUBMITTED	
6. MATERIAL TO BE TESTED	10A. QUANTITY SUBMITTED	11. QUANTITY REPRESENTED	12. SPEC. & AMEND AND/OR DRAWING NO. & REV. FOR SAMPLE & DATE
13. PURCHASED FROM OR SOURCE	14. SHIPMENT METHOD	15. DATE SAMPLED AND SUBMITTED BY	
16. REMARKS AND/OR SPECIAL INSTRUCTIONS AND/OR WAIVERS.			
17. SEND REPORT OF TEST TO			
SECTION B - RESULTS OF TEST (<i>Continue on plain white paper if more space is required</i>)			
1. DATE SAMPLE RECEIVED	2. DATE RESULTS REPORTED	3. LAB REPORT NUMBER	
4. TEST PERFORMED	RESULTS OF TEST	SAMPLE RESULT	REQUIREMENTS
DATE	TYPED NAME AND TITLE OF PERSON CONDUCTING TEST	SIGNATURE	
DD FORM 1222, FEB 62 (EF) REPLACES DD FORM 1222, 1 JUL 58, WHICH IS OBSOLETE.			
Reset			

HAZARDOUS WASTE (HW)

How do I dispose of used/unserviceable HW?

GREEN PROCEDURE:

Disposal procedures for **high quantity/frequently generated** HW streams typically generated at shops or motor pools.

The Green Procedure applies to two types of disposal contracts for hazardous substances available thru the DPW, EMD: the [HW Disposal Contract](#) and the [Waste Oil Disposal Contract](#).



Typical HW collection containers for high quantity/frequently generated waste streams

Yellow PROCEDURE:

Disposal procedures for **small quantity/occasionally generated** HW streams.

The Yellow Procedure includes turn-in to the Mannheim SORT Center as well as on-site disposal procedures.



RED PROCEDURE:

Disposal procedures for HW streams not listed in the Green or Yellow Procedure. The Red Procedure applies to special waste streams for which disposal solutions have to be made case by case.

HAZARDOUS WASTE (HW)

How do I dispose of used/unserviceable HW? (continued)

HW Disposal Contract

No HW Profile sheets required
No DD Form 1348-1A required

HW generators do **NOT** have to report the fill status of the containers to the DPW, EMO, unless there is an emergency.

Under the Mgmt Services contract, the HW disposal contractor will inspect the containers weekly and arrange the disposal of the HW.

There is a minimum pick-up quantity in the HW disposal contract. Contractor is not allowed to remove small quantities on a single Delivery Order.

Normal time frame between a scheduled pick-up and the actual removal is 5–10 work days.

POC: Ms. S. Fellhauer, DSN 381-8447

Waste Oil Disposal Contract

No HW Profile Sheets required
No DD Form 1348-1A required

HW generators **shall** request the pumping/disposal of the waste POL or Waste Fuel if the tank is approx. **75%** filled.

HW generators are required to inspect the fill status of the tanks at least once each operation day!

There is a minimum pick-up quantity in the Waste Oil disposal contract. Contractor is not allowed to remove small quantities on a single Delivery Order.

Normal time frame between a scheduled pick-up and the actual removal is 5-10 work days.

POC: Mr. F. Schork, DSN 381-7035

Which waste items apply for the Green Procedure?

All high quantity or frequently generated HW streams are collected in authorized HWAPs or in underground or above ground tanks. A detailed listing of approved HWAPs/tanks and the HW streams collected therein is provided on pages 40-42.

Absorbent
Metal Cans
Battery Acid
Batteries

Aerosol Cans
Plastic Cans
Anti-Freeze

Cartridges
Paint
Used POL

Filters
Rags
Waste Fuel

Grease
Solvent

HAZARDOUS WASTE (HW)

How do I dispose of used/unserviceable HW? (continued)

On-Site Removal

HW generator must complete DD Form 1348-1A and submit it to DPW, EMD.

DPW, EMD will send a representative from the HW disposal contractor to the generating unit/activity. The contract representative will review the waste stream, schedule the delivery of containers (if necessary), and schedule the removal.

Normal time frame between a scheduled pick-up and the actual removal is 5–10 work days.

SORT Center Turn-in

HW generator must complete a simplified DD Form 1348-1A at the SORT Center.

Maximum quantity of each waste stream accepted: 30 pounds!

Freon containing appliances: (Refrigerators, Air Conditioners etc.) are limited to: 3 each

Turn-in/Acceptance Hours:
Monday, 10.00 – 12.00 hrs
+
Wednesday, 10.00 – 12.00 hrs

Items NOT accepted:

- Ammunition and Explosives
- NBC Equipment (CDE Kits, DS2, STB)
- Infectious substances
- Military hand receipt and industrial type items

Which waste items apply for the Yellow Procedure?

All HW streams which are not included in the Green Procedure and occasionally generated HW streams, e.g.:

Cleaning Compounds	Batteries	Paints	Varnishes	Primers
Sealing Compounds	Adhesives	Glues	Aerosols	Paint
Polish & Wax	Lacquer	Bleach	Paint brushes	
Disinfectants	Pesticides	Thinner	Lab Chemicals	
Tires (without rims!)	Compressed Gas Cylinders			
Electronic Scrap (i.e. household type appliances, Computer equipment)				

HAZARDOUS WASTE (HW)

How do I dispose of used/unserviceable HW? (continued)

Which waste items apply for the Red Procedure?

- Various or mixed HW streams “found” in a basement/shop/building etc
 - Unknown hazardous substances
 - HW streams for which a unit/activity has no approved HWAP
 - Overflowing HW collection containers
1. Contact the DPW, EMD, HW Manager, Ms. Fellhauer, DSN 381-8447, Cell Phone 0175-724-1557, email SabineFellhauer@us.army.mil
 2. Ms. Fellhauer will either give you instructions via phone/email or will conduct a site-visit to provide solutions.
 3. Prepare a DD1348-1A Turn-in document and submit it to DPW, EMD.
 4. HW generator will receive disposal instructions, which can vary case by case.

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

HAZARDOUS WASTE (HW)

Where are the approved HWAPS/Tanks located?

INSTALLATION	BLDG #	APPROVED HW ACCUMULATION POINT	APPROVED HW TANK
BFV	311	Empty Plastic Cans	n/a
	313	Aerosol Cans, Detergents, Electronic Scrap, Medicine, Solvent	n/a
	739	Fixer, Developer, Detergent, Medical Items	n/a
Coleman Barracks	4a	n/a	Acids, Used Oil, Waste Fuel
	4b	Aerosol Cans, Batteries, Grease, Paint related material, Absorbent, Rags, Empty Cans	n/a
	9	Inorganic Lab Chemicals	Used Oil
	10a	n/a	Used Oil
	21	Fire Extinguishers, Fire Extinguisher Residue	n/a
	26	Aerosol Cans, CARC Paint, Metal Cans, Paint related material, Solvent, Tenside	n/a
	42	Fixer, Developer, Rags	n/a
	49	n/a	Used Oil
	49b	Aerosol Cans, Anti-Freeze, Absorbent, Rags, Filters, Empty Cans	n/a
	50	n/a	Used Oil
	56	n/a	Used Oil
	57	n/a	Used Oil
	57a	Aerosol Cans, Anti-Freeze, Absorbent, Rags, Filters, Empty Cans	n/a
	60	Aerosol Cans, CARC Paint, Metal Cans, Paint, Solvent, Grease	Waste Fuel
	78a	n/a	Anti-Freeze
	94	n/a	Waste Fuel
	97	n/a	Anti-Freeze, Used Oil
	1271	Aerosol Cans, Empty Cans, POL Solids, Paint related material	n/a
	1305	n/a	Used Oil
	1344	n/a	Anti-Freeze, Used Oil
	1344a	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Cartridges, Solvent, POL contaminated Packing Material	n/a
	1349	n/a	Used Oil
	1349a	Aerosol Cans, Anti-Freeze, Absorbent, Rags, Filters, Empty Cans, Solvent, Grease	n/a
	1373	n/a	Waste Fuel
	1373b	n/a	Used Oil, Waste Fuel
	1375	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans	Used Oil, Waste Fuel

HAZARDOUS WASTE (HW)

Where are the approved HWAPS/Tanks located? (continued)

INSTALLATION	BLDG #	APPROVED HW ACCUMULATION POINT	APPROVED HW TANK
Friedrichsfeld	1041	n/a	Waste Fuel
	1042A	Paint, Paint related material, Empty Cans, Solvent	n/a
Gruenstadt	3555	n/a	Acid, Used Oil
	3570	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Paint, Compressed Gas Cylinders	Used Oil
Spinelli Barracks	1504	n/a	Used Oil
	1504c	Anti-Freeze, Absorbent, Rags, Filters, Empty Cans, Grease	
	1563	Anti-Freeze	Used Oil
	1567	n/a	Used Oil
	1569A	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans	n/a
	1570	n/a	Anti-Freeze, Waste Fuel
	1572	n/a	Waste Fuel
	1572B	n/a	Used Oil
	1577	n/a	Anti-Freeze, Used Oil
	1609c	n/a	Waste Fuel
	1852	n/a	Acid, Anti-Freeze, Used Oil
	1854a	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Paint, Paint related material, Solvent	n/a
	1856	n/a	Used Oil, Waste Fuel
	1859	n/a	Used Oil
Sullivan Barracks	211	n/a	Anti-Freeze, Waste Fuel
	212	n/a	Anti-Freeze, Used Oil
	219a	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Cartridges, Grease	n/a
	249a		Anti-Freeze, Used Oil
	249b	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Cartridges, Grease	n/a
	260	n/a	Anti-Freeze, Waste Fuel
Taylor Barracks	338	Anti-Freeze	Used Oil, Waste Fuel
	348	n/a	Anti-Freeze, Used Oil, Waste Fuel
	351	Aerosol Cans, Rags, Filters, Empty Cans	Anti-Freeze, Used Oil
	355	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Grease	n/a
	356	Aerosol Cans, Empty Cans, Paint, Paint related material, Solvent	n/a
	374	Fluorescent Light Tubes	n/a
	399	Anti-Freeze	Used Oil

HAZARDOUS WASTE (HW)

Where are the approved HWAPS/Tanks located? (continued)

INSTALLATION	BLDG #	APPROVED HW ACCUMULATION POINT	APPROVED HW TANK
Taylor Barracks	400	n/a	Used Oil
	405b	Flammable, Corrosive, Toxic, and Oxidizing Household Hazardous Waste in small quantities, Refrigerators, Electronic Scrap, Tires without rims, etc.	Anti-Freeze, Waste Fuel
	421	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Grease, Paint, Cartridges, Paint related material, Solvent, Anti-Freeze	n/a
	426	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Anti-Freeze	Used Oil
	428	n/a	Anti-Freeze, Used Oil
	429	n/a	Acid, Anti-Freeze, Used Oil
	433	n/a	Waste Fuel
	435	n/a	Waste Fuel
Turley Barracks	461	n/a	Used Oil
	463	n/a	Used Oil
	464	n/a	Used Oil
	465	n/a	Used Oil
	469	n/a	Used Oil
	471	n/a	Waste Fuel
	519	Aerosol Cans, Absorbent, Rags, Filters, Empty Cans, Anti-Freeze, Grease	n/a

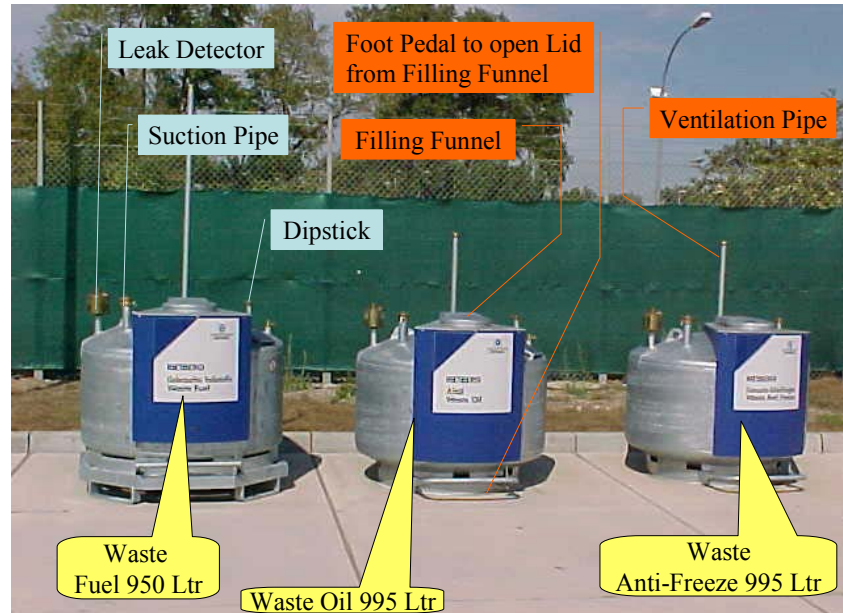
Access/keys to the authorized HWAPS can be obtained from the pertaining Unit Environmental Coordinator.

How do I obtain a key for my HWAP?

Unit Environmental Coordinators can request a key for their pertaining HWAP from the DPW, Environmental Management Division.

HAZARDOUS WASTE (HW)

How do I identify the fill status of a tank?



Above ground tank: read the dipstick to identify the fill status of the tank



Underground tank: read the dipstick and/or the monitoring unit to identify the fill status of the tank

- **Remember:**

HW generators **shall** request the pumping/disposal of the waste POL or Waste Fuel if the tank is approx. **75%** filled.

CHAPTER 3

MISCELLANEOUS

TABLE OF CONTENTS

	Page
DPW, Environmental Mgmt Division Contacts	45
Training on HM/HW Management	46
German Final Governing Standards (FGS)	46
Environmental Quality Control Committee (EQCC)	46
Hazardous Waste Management Board (HWMB)	46
Environmental Performance Assessment System (EPAS)	47
Immediate Spill Response Procedure	48
Spill Incident Report	49
Electronic Scrap, Tires, and Freon containing items Turn-in Procedures	50
Environmental CD	51

MISCELLANEOUS

DPW, Environmental Management Division Contacts

Chief/EMD
<p>Ms. Mary Kay Foley, P.E. Taylor Barracks, Bldg #346, Room #315 DSN: 381-8675 FAX: 381-8289 Cell Phone: 0175-724-1503 Mary.Foley@us.army.mil</p>

HM/HW Management, EPAS Inspections	Tank Management, Drinking Water
<p>Ms. Sabine Fellhauer Taylor Barracks, Bldg #346, Room #306 DSN: 381-8447 FAX: 381-8289 Cell Phone: 0175-724-1557 Sabine.Fellhauer@us.army.mil</p>	<p>Mr. Franz Schork Taylor Barracks, Bldg #346, Room #316 DSN: 381-7035 FAX: 381-8289 Cell Phone: 0175-724-1579 Franz.Schork@us.army.mil</p>
Spill Incidents, Environmental Projects	SORT, Solid Waste, Scrap Metal, Medical Waste
<p>Mr. Yitbarek Gebreyohannes Taylor Barracks, Bldg #346, Room #306 DSN: 381-7699 FAX: 381-8289 Cell Phone: 0175-724-1534 Yitbarek.Gebreyohannes@us.army.mil</p>	<p>Mr. Wolfgang Ziegler Taylor Barracks, Bldg #346, Room #316 DSN: 381-7029 FAX: 381-8289 Cell Phone: 0175-724-1582 Wolfgang.Ziegler@us.army.mil</p>
Asbestos Mgmt, Cultural & Historical Sites	Technical Assistance, HM/HW Trng
<p>Mr. Bernd Weinerth Taylor Barracks, Bldg #346, Room #307 DSN: 381-7007 FAX: 381-8289 Cell Phone: 0175-724-1580 Bernd.Weinerth@us.army.mil</p>	<p>Ms. Ulrike Gruenewald Taylor Barracks, Bldg #346, Room #307 DSN: 381-7511 FAX: 381-8289 Ulrike.Gruenewald@us.army.mil</p>
Pollution Prevention, EPAS Inspections	E M S
<p>Ms. Ulrike Martin Taylor Barracks, Bldg #346, Room #306 DSN: 381-7405 FAX: 382-8289 Ulrike.Martin1@us.army.mil</p>	<p>Ms. Jessika Schoplick Taylor Barracks, Bldg #346, Room #306 DSN: 381-7405 FAX: 381-8289 Jessika.Schoplick@us.army.mil</p>

All personnel can be reached at: emd@bsbdpw.mannheim.army.mil

DPW Web site: <http://home.mannheim.army.mil/sites/directorates>

MISCELLANEOUS

Training on HW/HW Management

- **New** Unit Environmental Coordinators (UECs) are required to complete a 32-hour UEC training course.
- **Existing** UECs are required to complete an annual 8-hour Refresher training Course.
- Both courses are offered free thru DPW, EMD. However, Unit Environmental Coordinator appointment letters must be available for the individuals requesting the new UEC training course.

➤ POC for training reservations is Ms. Gruenewald, DSN 381-7511.

Please note: These training courses are not the HAZ11 or HAZ12 courses.

German Final Governing Standards (FGS)

The FGS are a comprehensive set of country-specific substantive environmental provisions, which are implemented to meet US and/or Host Nation environmental requirements.

- On-line training on the FGS is available at <http://ima-euro.urscemetro.com/References.asp>
- DPW, EMD personnel will provide the German FGS on a CD – just bring a blank CD to the EMD office.

Environmental Quality Control Committee (EQCC)

The EQCC will meet at least once a quarter and act on the broad range of environmental issues covered in USAREUR Regulation 200-1, Environmental Quality Program. Membership of the EQCC will include at least the Garrison Commander, the DPW, the EMO, the director of each major staff section of the Garrison, command representatives from each tenant organization, and DRMO field office representatives.

Hazardous Waste Management Board (HWMB)

The HWMB will meet at least twice a year to discuss HW issues and provide recommendations to solve HW problems. Membership of the HWMB will include at least a representative from the DPW office, the Safety office, the DOL office, the Resource Mgmt office, JAG office, Preventive Medicine office and Unit Environmental Coordinators from each tenant organization.

MISCELLANEOUS

Environmental Performance Assessment System (EPAS)

The [external](#) EPAS is an extensive review of the environmental program and is conducted at each Garrison [every 3 years](#) by IMA-Europe. The EPAS assesses how well units and tenants are complying with environmental regulations.

The environmental regulations for US in Germany are contained in the Final Governing Standards for Germany.

Functional areas assessed:

- | | |
|--|-------------------------------------|
| 01. Environmental Program Management | 02. Air Emissions |
| 03. Drinking Water | 04. Wastewater |
| 05. Hazardous Material | 06. Hazardous Waste |
| 07. Solid Waste | 08. Medical Waste |
| 09. Petroleum, Oils, Lubricants | 10. Environmental Noise |
| 11. Pesticides | 12. Cultural Resources |
| 13. Natural Resources | 14. Polychlorinated Biphenyls |
| 15. Asbestos and Artificial Mineral Fibers | 16. Radon |
| 17. Lead-based Paint | 18. Spill Prevention/Response |
| 19. Underground Storage Tanks | 20. Environmental Effects
Abroad |

[Internal](#) EPAS assessments are conducted [annually](#) by DPW, EMD representatives.

The most current assessment checklist for each functional area can be obtained from DPW, EMD.

MISCELLANEOUS

Immediate Response Procedure

If it is a minor spill (no threat to the environment),
clean it up immediately, if not ...

Report the Spill

Call **BSB Fire Department** on post **DSN 117** /
off post **CIV 0621-730-117**
Report: Initial responder name, location, time, type/quantity
of spill, need for emergency medical assistance.

Determine Safe Actions

Check **MSDS**. What is it, how can it hurt me, and what can
I safely do?

Stop the Leak

Close valves, stop pumps, shut down power, move
containers. Do not contact or breathe vapors from material.

Control and Contain

Keep spill from spreading. Close containment valves.
Put down portable containments or absorbents.

POCs for Notification of Significant Spills

Division	Name	Office (DSN)	Cell (CIV)
Fire Department	On post: DSN 117 Off post: CIV 0621-730-117		
Fire Department	Mr. Ott	382-4669	0175-7241667
Fire Department	Mr. Hille	382-4120	0175-7241656
EMD	Ms. Foley	381-8675	0175-7241503
EMD	Mr. Gebreyohannes	381-7699	0175-7241534
DPW	Mr. Scavone	380-1560	0175-7241360
BSB Ambulance	Office 380-4095 / 382-5386 Emergency DSN 116		
German Fire Department	Office CIV 0621-328880 Emergency CIV 112		
German Police	Office CIV 0621-718490 Emergency CIV 110		

MISCELLANEOUS

Spill Incident Report

Person reporting the spill: _____

Activity/unit: _____ Telephone: _____

Date: _____ Time: _____

Location of spill (Installation, Building Number, be specific): _____

Type of pollutant: _____

Approximate quantity: _____

Cause/Source of spill: _____

Is spill continuing? ____ Yes ____ No

If continuing, what is the maximum potential quantity? _____

Check applicable items:

- _____ contained in a catch basin or other container
- _____ uncontained over pavement, gravel area, or grass
- _____ absorbed into ground
- _____ draining into sewer system
- _____ draining into pond, river

Potential dangers (e.g. Fire, Explosion, Toxic Fumes): _____

Has the Fire & Emergency Services Division been called ? _____

Corrective action to eliminate pollution source/remove pollutant: _____

NOTE: Contaminated soil/gravel must be temporarily stored at the Coleman Contaminated Soil Platform, Building #1300. Contaminated soil/gravel will only be accepted if a completed Spill Incident Report is available at DPW, EMD.
➤ POC for turn-in appointment is Mr. Gebreyohannes, DSN 381-7699.

MISCELLANEOUS

Electronic Scrap, Tires, and Freon containing items Turn-in Procedures at the SORT Center

Electronic Scrap has to be segregated in the following different collection containers/categories:

- ◇ Monitors, TVs, CPUs, Keyboards
- ◇ Microwaves
- ◇ Regular electronic scrap (small items)

All plastic and metal parts that are loose or can be unscrewed from an item must be removed or dismantled before disposal.

Tires are only accepted without rims. Customers can remove the rims at the DCA, Skill Development Center, Building #426.

Freon containing items (Refrigerators, Cooling Units, Air Conditioners etc.) are limited to 3 each items per unit/activity only. Higher quantities will be removed by the contractor directly on the units/activity site.

Please note: Military, Department of the Army Civilians, other DOD civilians, Local National and contractor employees living off-post are not authorized to bring their household waste/hazardous waste and dispose it on any US controlled installation or the SORT Center.



What are the Opening Hours of the SORT Center?

- Regular Opening Hours: Monday – Friday: 08.00 – 16.30 hrs
Saturday: 08.00 – 15.30 hrs
- Effective 01 Dec 2005: Closed on Monday afternoon!
- Receiving Hours of HW: Monday + Wednesday: 10.00 – 12.00 hrs **only!**

MISCELLANEOUS

Environmental CD

The following information/data is provided on the Environmental CD. Just bring a blank CD to the DPW, EMD and all information/data will be copied on the CD.

- USAG Mannheim Installation Maps
- HW Management Plan & Waste Registry
- All German FGS protocols
- Spill Response Plan
- SORT Guidance
- Generic German Operating Procedures
- EPAS Checklist for HM/HW assessment
- Hazard, Mandatory, Prohibitory Signs (PowerPoint Version)
- HM Inventory (Excel Worksheet)
- HM/HW Container/Storage Area Inspection Checklist (Excel Worksheet)
- Blank DD Form 1222
- Sample DD Form 1348-1A, HM Turn-in
- Sample DD Form 1348-1A, HW Turn-in
- USAG Mannheim HM & HW Handling and Disposal Handbook